

Work Order ID 68880-1

Monday, April 25, 2011 8:10:08 AM

Page 1

Item ID: D1038-58B

Accept

Revision ID:

Item Name: Fastener Rail, Black

Start Date: 4/25/2011 Start Qty: 100.00

Required Date: 5/6/2011 Req'd Qty: 100.00

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D1038

Rev B

100

0.00



DC

Document Control

DOCUMENT CONTROL

Memo

Create white labels and bag them

0.00

110

0.00



Bandsaw

Jeaspa Bandsaw

BAND SAW

Memo

Cut extrusion D2023 to length 21.81" (+0.06/-0.00)

0.00

120

0.00



HAAS I

HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

Memo

1- Mill as per Folio FA783 Rev: AA & Dwg D1038 Rev: B  
2-Deburr per dwg D1038

0.00



Cust Item ID:

Customer:



Setup Start



Stop



Run Start



Stop

pf  
ch  
MF  
(30) 11-04-25

30 0

30 0

B.A 11/04/25

B.A 11/04/25

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Customer:

Reference:

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Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

0.00

H.A 11/04/25

30

0

140



QC

Quality Control

QC8- Inspect parts - second check

0.00

Memo

0.00

SL 11/04/26

30

150



Small Fab

Small Fab

Small Fab

Memo

Debur

0.00

0.00

FS 11/04/27 30

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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Required Date: 5/6/2011 Req'd Qty: 100.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

170

Outsource process-Anodize per QSI017 4.1.10.1

0.00



Outsource4

Memo

0.00

Outsource process - Anodize

Issue P/O: 13960  
Black Anodize as per Dwg D1038

180

Receive & Inspect for Damage & Mat'l Certs

0.00



Packaging

Memo

0.00

Packaging

5 w/0427

count  
x30

CL 11/04/27 (30)

Pu/0/5 (30)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

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Cust Item ID:

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190



QC

Quality Control

QC3- Inspect Part Finish

*all*

Memo

0.00

0.00

*8/11/05/05**counter*  
*(x30)*

200



Small Fab

Small Fab

Small Fab

Memo

1-Stake .050 stainless steel wire per Dwg D1038-58 using DT8389

Batch: *1911948*

2-Grind wire flush and deburr

3-Clean

0.00

0.00

*8/11/05/06* *(30)*

210



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

*8/11/05/06**counter*  
*(x30)*

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Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

220

0.00



Packaging

Packaging

Memo

0.00

Packaging

1-Pack each fastener rail into a cardboard tube  
2-Roll Part in foam  
3-Install red cap at each end and secure with tape.  
4-Apply white labels to cardboard tubes  
5-Identify and Stock  
Location: 121

11/5/92 302

230

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/5/92

mk  
11-05-09



# Picklist Print

Monday, April 25, 2011 8:10:05 AM

Page 1

Work Order ID: 68880



Parent Item: D1038-58B



Parent Item Name: Fastener Rail, Black


Start Date: 4/25/2011

Required Date: 5/6/2011

Start Qty: 100.00

Required Qty: 100.00

Comments: IPP: E 03.05.02 Reformat; Added label KJ/RF  
IPP Rev:F 06-08-16 Updated Packaging Procedures JLM  
IPP Rev:G 08-09-16 Added Folio # JLM Verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2023  Extrusion, Fastener Rail		Manufactured	No			110	f	1,414.000	1.903	190.3			



Location

MAT006

21907

Loc Qty

1414

1414

Loc Code

55.000 ft B.A 11/04/25

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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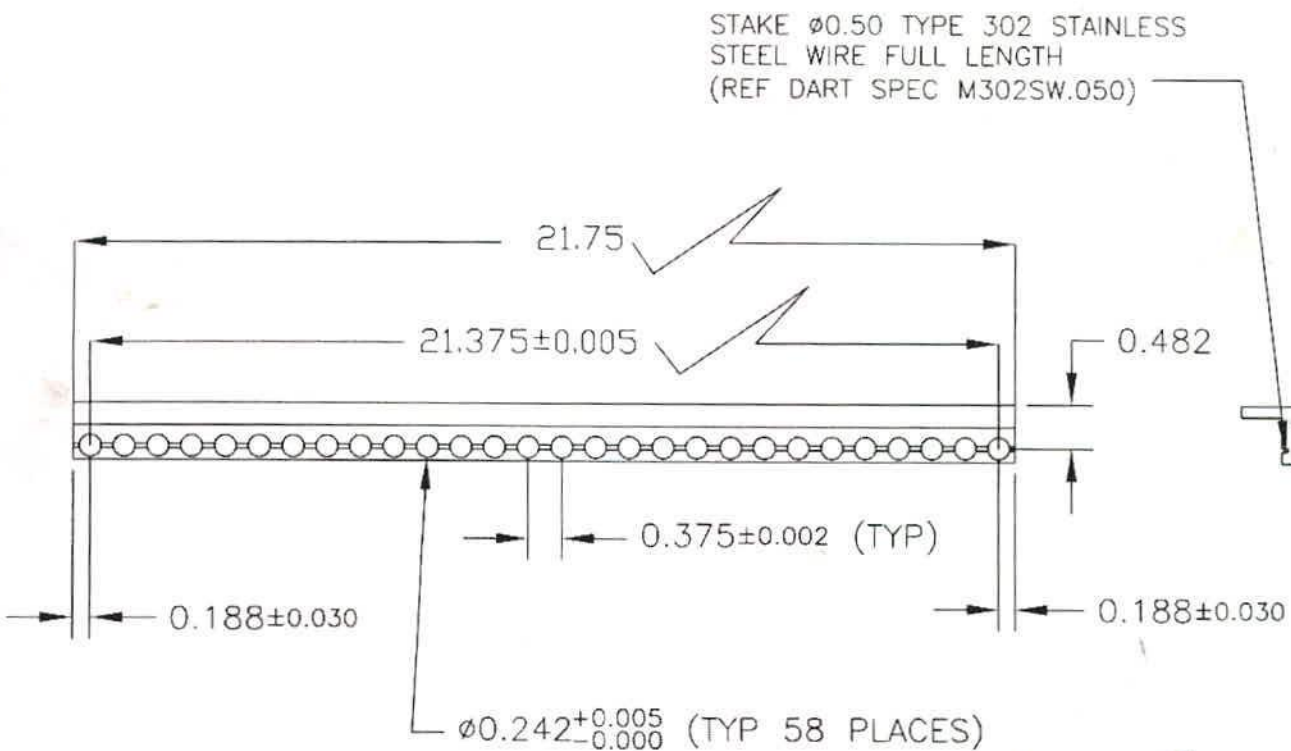
**NOTE:** Date & initial all entries

**DART**

RELEASED

05.03.31

DESIGN	DRAWN BY	DART AEROSPACE LTD	
		HAMKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. B
05.02.02		D1038	SHEET 1 OF 1
DATE		TITLE	SCALE
		1/4 TURN FASTENER RAIL	NIS
	91.05.05	NEW ISSUE	
A	04.05.14	UPDATE TOLERANCE	
B	05.02.02	REDRAWN, UPDATE NOTES	

**D1038-58 1/4 TURN FASTENER RAIL**

- 1) MAKE FROM D2023 EXTRUSION
- 2) FINISH: D1038-58 - NONE  
D1038-58B - ANODIZE BLACK PER DART QSI 017 4.1-10
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED







Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO1260

Purchase Order Date 4/27/2011

PO Print Date 4/27/2011

Page Number 1 of 1

Order From :

VC-AND002

ANODIZING & PAINT T.N.M. INC.  
21 AVIATION ROAD  
POINTE CLAIRE, QC H9R 4Z2  
CA

Contact Name  
Vendor Phone 514 429 7777  
Vendor Fax 514 429 5108  
Vendor Account Nbr

Buyer Chantal Lavoie  
Requisition Nbr  
Tax Resale Nbr 10127-2607  
Terms Net 30  
Currency CAD  
FOB Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**FAKED**  
21/11/04/27

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	68880	D1038-58B FASTENER RAIL	5/2011 may 2 weeks ship Yes back	30.00	FedEx PI collect	\$4.0000	\$120.00

Special Inst: BLACK ANODIZE AS PER MIL-A-8625F  
TYPE 1 /IB/IC/II/III  
CLASS 2

PO Total:

\$120.00

*RUSH PLEASE*

*Please advise delivery.*

*thanks  
chantl*

CERTIFICATE OF CONFORMITY  
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 4/27/2011

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable



21 chemin de l'Aviation, Pointe-Claire  
QC H9R 4Z2

Canada

Phone:514-429-7777 Fax:514-429-5108

Email:info@tnminc.ca

## Packing Slip.

DATE

PACKING SLIP #

5/4/2011

- 89322



BILL TO:

SHIP TO:

DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY ON K6A 1K7

No. De Commande/PO#	CUST	TERMS	REP	SHIP	VIA	F.O.B	JOB NUMBER
13960	0094	NET 30		5/5/2011	Purolator		131069-001

PO Line#: 1

QTY DUE	QTY SHIPPED	QTY B/O	DESCRIPTION
30	30	0	P/N:D1038-58B TNM-REV:P1

Sign Here: \_\_\_\_\_

En cas de perte ou de dommages dû à la valeur intrinsèque de certaines pièces, la responsabilité se limitera à deux fois la valeur du traitement des pièces perdues ou endommagées.

Due to the intrinsic value of some parts, we are only liable for loss or damage to twice the invoiced finishing costs.

Packing Slip PACK01 REV: PACK01



## Anodisation & Peinture TNM Inc

21 chemin de l'Aviation, Pointe-Claire QC H9R 4Z2  
Telephone 514-429-7777 Fax 514-429-5108  
AS9100 Rev B Certified QMS, Nadcap, Chemical & NDT

C of C: 89322



5/4/2011

CLIENT / CUSTOMER:

CERTIFICATE OF COMPLIANCE  
CERTIFICAT DE CONFORMITE

DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY ON K6A 1K7

PURCHASE ORDER /  
NO. DE COMMANDE: 13960

ITEM	COMMANDE ORDERED	EXPEDIE SHIPPED	PART NUMBER & DESCRIPTION PROTECTIVE FINISH CODES	PART PROCESS & TREATMENT
1	30	30	P/N:D1038-58B TNM-REV:P1 B68880 FASTENER RAIL MAT'L: ALUMINIUM D1038-58B FASTENER RAIL B68880	BLACK ANODIZE PER MIL-A-8625F1 TYPE II CLASS 2 ALL OVER

Solutos

Nous certifions que les pièces énumérées ont été traitées, testées et inspectées selon les spécifications mentionnées.  
Les cartes de travail ont été remplies et sont disponibles pour consultation, sur demande.  
All parts are processed, tested, and inspected to the requirements of above specifications.  
Travel cards have been filled and are available for viewing upon request.  
NOTE: Les pièces peintes seront complètement résistantes au solvant après 7 (sept) jours complets de séchage à l'air ambiant.  
NOTE: Painted Parts will be Fully Solvent Resistant after 7 (seven) Full Days of Air Curing at Ambient Temperatures"

Signature/Signed:

 9  
T.N.M.

Directeur de la Qualité / Q.A. Manager



**Quality System Instruction 017**  
**PRODUCT SPECIFICATIONS FOR PURCHASING**  
**AND PRODUCTION USE**

Procedure Issue Date: 04.12.02      Issue No: 05

**4.1.8      LABELS**

- 4.1.8.1      Labels for exterior use shall be manufactured from 3M 7 mil Masking Film #8522CP or Avery IPM #2031.

**4.1.9      PLATING**

- 4.1.9.1      Cad Plating is to be done per QQ-P-416F Class 1 Type II.
- 4.1.9.2      Zinc Plating is to be done per QQ-P-325C Class 1 Type II.

**4.1.10     ANODIZING**

- 4.1.10.1      Anodize per MIL-A-8625F Type I or IB or IC or II or IIB Class 2

**4.2        ALTERNATES**

These alternatives are acceptable unless otherwise stated on a drawing. Any substitutions not listed below require engineering approval.

- 4.2.1      The following are interchangeable: 80-007-15, SL3159-4A-15, K100H4A95-15, FT5215-12A-15, and FIT7623-4A-15
- 4.2.2      Avibank inserts ALS7-XXXX-YYY may be used interchangeably with ALS4-XXXX-YYY, AKS7-XXXX-YYY, and AKS4-XXXX-YYY or Interfast AELS-XXX-YYY. For example, ALS7-1032-130 may be used interchangeably with ALS4-1032-130, AKS7-1032-130, AKS4-1032-130 and AELS-032-130 inserts and ALS7-1032-225 may be used interchangeably with ALS4-1032-225, AKS7-1032-225, AKS4-1032-225 and AELS-032-225 inserts. Locking inserts (designated by an L at the end of the part number i.e. ALS7-1032-130L) may be substituted for non-locking inserts (ie. ALS7-1032-130) with approval from Engineering only.
- 4.2.3      MS21042L? can be used interchangeably with the corresponding MS21042-?  
E.g. MS21042L4 for MS21042-4  
MS21042L? are non-interchangeable with MS21042L0?  
E.g. MS21042L6 cannot be changed with MS21042L06
- 4.2.4      5052-H34 AND 5052-H32 can be used interchangeably.
- 4.2.5      MS21919WDG and MS21919DG are interchangeable.
- 4.2.6      ANXXX-XJ, ANXXX-XK, and ANXXX-XC can be used interchangeably  
MSXXXXX-XJ, MSXXXXX-XK, and MSXXXXX-XC can be used interchangeably
- 4.2.7      BLC3C15S and BLRS-002 can be used interchangeably